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**NATIONAL PHOTOGRAPHIC
INTERPRETATION CENTER**

Summary Report

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PROBABLE MOBILE VERSION OF RAMONA ELINT SYSTEM IDENTIFIED IN CZECHOSLOVAKIA (TSR)

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SR-020/79

APRIL 1979

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[redacted]

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PROBABLE MOBILE VERSION OF RAMONA ELINT SYSTEM IDENTIFIED IN CZECHOSLOVAKIA (TSR)

(TSR) [redacted] the production and testing of a mobile version of the Ramona automated ELINT collection and target locating system in Czechoslovakia. Detailed analysis of [redacted] indicates that this mobile version, the Ramona-M, was probably present at Opatovice Army Barracks 001 [redacted] Czechoslovakia. Equipment observed included a [redacted] sphere on a [redacted] mast, two van trailers, and one van truck. The mast appeared to be cable connected to a van trailer (Figure 1).

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(TSRU) The Ramona-M system reportedly has been under development since June 1975 and has undergone prototype testing between March and December 1978.¹ The Ramona-M at Opatovice 001 was probably undergoing prototype testing when imaged on [redacted]

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(TSRU) Recent reports indicate that acceptance testing of the mobile Ramona-M will take place from March to September 1979. It is scheduled to be released to the armed forces in late 1979.¹

(TSRU) The operation of the mobile Ramona-M reportedly is similar to that of the fixed Ramona system which consists of a center station with two flank stations approximately 15 nautical miles apart. The time difference of arrival of signals from the flank stations to the center station determines the target's location.¹ An attache photograph shows a probable Ramona-M at Chrudim, Czechoslovakia, in September 1978 (Figure 2).²

(S) Comments and queries regarding this report are welcome. They may be directed to [redacted] Warsaw Pact Forces Division, Imagery Exploitation Group, NPIC, [redacted]

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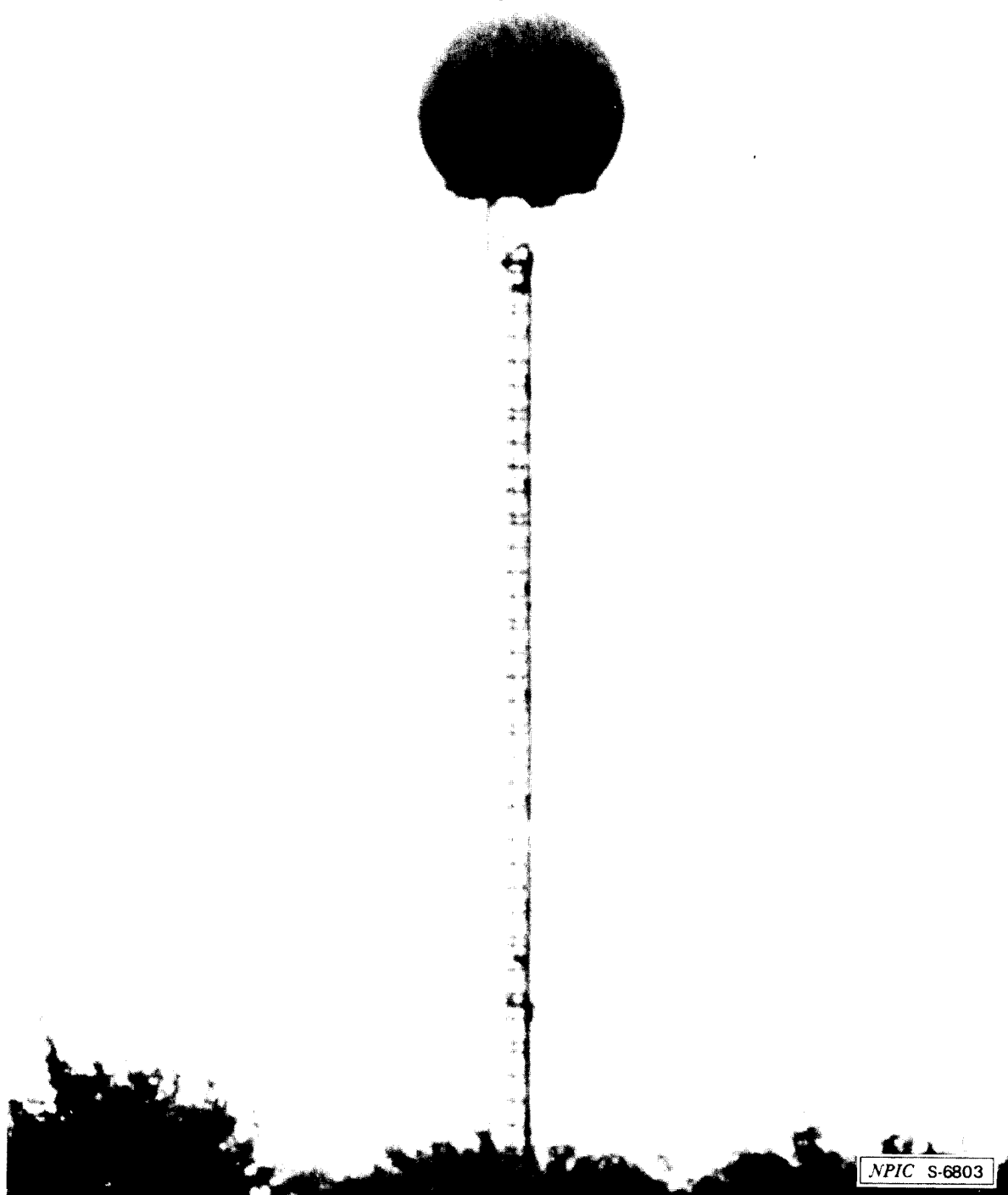


FIGURE 2. GROUND PHOTOGRAPH OF RAMONA-M AT CHRUDIM, CZECHOSLOVAKIA. Photograph taken from Reference Document 2.

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REFERENCES

DOCUMENTS

1. NSA. Report No 3/00/30540-78, *Czechoslovakia Developing Mobile Version of the Ramona ELINT Collection System*, 14 Sep 78 (TOP SECRET []) 25X1
2. DoD. IR 40/78, 6824-0307-78, Sep 78 (CONFIDENTIAL)

RELATED DOCUMENTS

- NSA. 3/00/8862-79, *Czechoslovaks Prepare for Military Testing of Mobile ELINT Collection System (TSC)*, 082233Z Mar 79 (TOP SECRET []) 25X1
- NSA. 3/00/5224-79, *Development of Czechoslovak Mobile ELINT Collection System Continues (TSC)*, 091528Z Feb 79 (TOP SECRET []) 25X1
- NSA. 3/00/35411-78, *Czechoslovakia Schedules Tests of Probable Mobile Ramona ELINT System from April to September 1979*, 231416Z Oct 78 (TOP SECRET []) 25X1
- NSA. Report No 3/00/13809-76, *The Czechoslovak Automated ELINT Collection and Information Forwarding System, Ramona, as of April 1976*, 29 Apr 76 (TOP SECRET []) 25X1
- NSA. 3/00/13809-76, *The Czechoslovak Automated ELINT Collection and Information Forwarding System, Ramona, as of April 1976*, 291759Z Apr 76 (TOP SECRET []) 25X1

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List of Conversion Factors by Classification

UNITS OF LENGTH

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
MILLIMETERS	0.0394	INCHES
CENTIMETERS	0.3937	INCHES
INCHES	25.4000	MILLIMETERS
INCHES	2.5400	CENTIMETERS
FEET	0.3048	METERS
FEET	0.0003	KILOMETERS
YARDS	0.9144	METERS
METERS	3.2808	FEET
METERS	0.0005	MILES(NAUTICAL)
METERS	1.0936	YARDS
KILOMETERS	3280.8400	FEET
KILOMETERS	0.6214	MILES(STATUTE)
KILOMETERS	0.5400	MILES(NAUTICAL)
MILES(STATUTE)	1.6093	KILOMETERS
MILES(NAUTICAL)	6076.1154	FEET
MILES(NAUTICAL)	1.8520	KILOMETERS
MILES(NAUTICAL)	1852.0000	METERS

UNITS OF MASS

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
KILOGRAMS	2.2046	POUNDS(AVOIR.)
POUNDS(AVOIR.)	0.4536	KILOGRAMS
SHORT TONS	0.9072	METRIC TONS
METRIC TONS	1.1023	SHORT TONS
METRIC TONS	0.9842	LONG TONS
LONG TONS	1.0160	METRIC TONS

UNITS OF VOLUME

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
LITERS	0.2642	GALLONS
LITERS	0.0063	BARRELS(POL)
LITERS	0.0010	CUBIC METERS
GALLONS	3.7854	LITERS
GALLONS	0.1337	CUBIC FEET
GALLONS	0.0238	BARRELS(POL)
GALLONS	0.0038	CUBIC METERS
BUSHELS	0.0352	CUBIC METERS
CUBIC FEET	7.4805	GALLONS
CUBIC FEET	0.1781	BARRELS(POL)
CUBIC FEET	0.0283	CUBIC METERS
CUBIC YARDS	0.7646	CUBIC METERS
BARRELS(POL)	158.9873	LITERS
BARRELS(POL)	42.0000	GALLONS
BARRELS(POL)	5.6146	CUBIC FEET
BARRELS(POL)	0.1590	CUBIC METERS
CUBIC METERS	1000.0000	LITERS
CUBIC METERS	264.1721	GALLONS
CUBIC METERS	35.3147	CUBIC FEET
CUBIC METERS	28.3776	BUSHELS
CUBIC METERS	6.2898	BARRELS(POL)
CUBIC METERS	1.3080	CUBIC YARDS

UNITS OF AREA

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
SQUARE CENTIMETERS	0.1550	SQUARE INCHES
SQUARE INCHES	6.4516	SQUARE CENTIMETERS
SQUARE FEET	0.0929	SQUARE METERS
SQUARE YARDS	0.8361	SQUARE METERS
SQUARE METERS	10.7639	SQUARE FEET
SQUARE METERS	1.1960	SQUARE YARDS
SQUARE METERS	1.0000	CENTARES
SQUARE METERS	0.0002	ACRES
SQUARE METERS	0.0001	HECTARES
ACRES	4046.8564	SQUARE METERS
ACRES	0.4047	HECTARES
HECTARES	10000.0000	SQUARE METERS
HECTARES	2.4711	ACRES

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